

44

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 70000

Page 2

Wednesday, May 25, 2011 11:29:57 AM

Item ID: D350-689-017

Accept



Setup Start



Revision ID:

Stop



Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 5/25/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 6/3/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130		0.00							
	Packaging					11/6/08	50		(40)
Packaging	Memo	0.00							
Packaging	Identify and pack for shipping as per PPP D350-689-017								
	Location: <u>S2</u>								
	PPP Rev: <u>Draft</u>								
140	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

11/6/08
mmf
11-06-08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, May 25, 2011 11:30:03 AM

Page 1

Work Order ID: 70000

Parent Item: D350-689-017

Parent Item Name: Shoulder Harness (4 point inertia reel)

Start Date: 5/25/2011

Required Date: 6/3/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A new issue DD 10.04.23 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN5-4A Bolt		Purchased	No			110	Each	88.0000	2	8			
					<u>Location</u>								
					ST337			88					
					108408			88					
D4071-041 Shoulder Harness Assembly		Manufactured	No			110	Each	0.0000	2	8			
MS21042L5 Nut		Purchased	No			110	Each	1,243.000	2	8			
					<u>Location</u>								
					ST300			1243					
					116105			283					
					116548			260					
					117441			500					
					117591			100					
					117611			100					
NAS1149D0516J Washer		Purchased	No			110	Each	163.0000	4	16			
					<u>Location</u>								
					ST298			163					
					114797			163					

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D350-689 REV. A
AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-689 REV 0

REF TCCA STC: SH02-33

REF FAA STC: SR01620NY

REF EASA STC: EASA.IM.R.S.01453

REF BRAZILIAN STC: 2005S03-09

REFERENCE ONLY

PURPOSE:

TO PROVIDE AN OPTIONAL SHOULDER HARNESS KIT TO BE INSTALLED ON THE D350-689-011/-021 DUAL HIGH BACK SEAT INSTALLATIONS.

CHANGE:

ADD OPTIONAL D350-689-017 SHOULDER HARNESS KIT (4 POINT INERTIA REEL) TO PARTS LIST OF IIN-D350-689 REV A AND ICA-D350-689 REV 0 AS DETAILED BELOW.

PARTS LIST:

Qty -017	Part Number	Description
X	D350-689-017	SHOULDER HARNESS KIT (4 POINT INERTIA REEL)
2	D4071-041	SHOULDER HARNESS ASSY
2	AN5-4A	BOLT
4	NAS1149D0516J	WASHER
2	MS21042L5	NUT (OR MS21042-5)

INSTRUCTIONS:

TO INSTALL D350-689-017 SHOULDER HARNESS KIT:

1. DRILL Ø0.323 HOLES AS INDICATED ON SHEET 2, DETAIL "A" OF THIS SERVICE INSTRUCTION FOR THE INERTIA REEL.
2. DEBURR AND TOUCH UP DRILLED HOLES AS INDICATED ON IIN-D350-689 SECTION 3.1 ITEM 5 (PG 4).
3. GUIDE SHOULDER HARNESS WEBBING THRU D3031-1 LOOP BY REMOVING LOOP FIRST, POSITIONING WEBBING AND FINALLY REPLACING D3031-1 LOOP. TORQUE FASTENERS TO 15-25 in-lbs.
4. INSTALL INERTIA REEL OF D4071-041 HARNESS ASSY USING THE HARDWARE PROVIDED AS PER FIGURE 1 (SHEET 2). ALIGN INERTIA REEL TO ENSURE WEBBING IS STRAIGHT. TORQUE FASTENERS TO 100-140 in-lbs.
5. REPEAT STEPS 3 & 4 FOR THE SECOND SHOULDER HARNESS.
6. INSTALL D4071-041 LAP BELT ASSY (QTY 2) USING EXISTING HARDWARE PROVIDED WITH D350-689-041/-043 DUAL HIGH BACK SEAT ASSEMBLY. SEE FIGURE 2 (SHEET 2) FOR REFERENCE.






WEIGHT AND BALANCE:

Installation	Weight	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D350-689-017 SHOULDER HARNESS KIT (Seat's Fwd position)	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-kG	60.7 in 1.54 m	267 in-lb 3.08 m-kG
D350-689-017 SHOULDER HARNESS KIT (Seat's Aft position)	4.4 lb 2.00 kg	-18.2 in -0.46 m	-80.1 in-lb -0.92 m-kG	64.7 in 1.64 m	285 in-lb 3.28 m-kG

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: 
D. SHEPHERD (DE # 02)

DATE: 10.04.13
CERT. NO.: SH02-33
ISSUE NO.: 1

A	NEW ISSUE.	JPH	10.04.13
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9499	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		SHOULDER HARNESS KIT	NTS
DATE	10.04.13	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

D350-689-041/-043
DUAL HIGH BACK
SEAT ASSEMBLY

D3031-1
LOOP

D4071-041
(SHOULDER HARNESS)

Ø 0.323

0.50

2.25

REFERENCE ONLY

DETAIL A

PLATE REWORK

PARTS REMOVED FOR CLARITY

A

A

AN5-4A BOLT
NAS1149D0516J WASHER, 2X
MS21042L5 NUT

FIGURE 1

DUAL HIGH BACK SEAT ASSEMBLY
WITH D350-689-017
ONE HARNESS ASSY SHOWN

USE EXISTING
HARDWARE TO
INSTALL LAP
BELT ASSY

D4071-041
(LAP BELT ASSY)

B

B

FIGURE 2

DUAL HIGH BACK SEAT ASSEMBLY
WITH D350-689-017
ONE LAP BELT ASSY SHOWN FOR CLARITY

D4071-041
(LAP BELT)

D350-689-041/-043
DUAL HIGH BACK
SEAT ASSEMBLY

EXISTING
HARDWARE

SECTION VIEW B-B
LAP BELT ASSY INTL
(ROTATED VIEW)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED

BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 10.04.13
CERT. NO.: SH02-33
ISSUE NO.: 1

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APPROVED	<i>[Signature]</i>
DE APPR.	<i>[Signature]</i>

DATE 10.04.13

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.	REV. A
DSI 9499	SHEET 2 OF 2
TITLE	SCALE
SHOULDER HARNESS KIT	NTS

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